

ABSTRACT

The present invention relates to a method for forming a high resistive region in a semiconductor device. A pattern having the bottom wider in width than the top such as a trench is formed in a region where an inductor will be formed by means of a two-step or multi-step etch processes. While forming an air gap at the corner of the bottom of the trench using a coverage characteristic of an insulating material, the trench is buried with the insulating material to easily form a high resistive region. Therefore, the present invention can minimize reduction in the quality factor (Q reduction) by preventing, by maximum, the eddy current from being generated in the substrate due to the inductor.